## COLORADO RIVER RECOVERY PROGRAM FY 2003 ANNUAL PROJECT REPORT

RECOVERY PROGRAM PROJECT NUMBER: 137

## I. Project Title:

Development of a centrarchid monitoring plan for the Colorado River, Colorado.

II. Principal Investigator(s): Kevin Bestgen

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## III. Project Summary:

The goal of the study was to develop a sampling methodology to more accurately detect the presence and estimate the abundance of centrarchid fishes in backwaters of the Colorado River, Colorado. Our approach had three main objectives. The first was to develop a sampling program and technique to determine the number of backwaters to be sampled in the reach. An optimal design will determine the minimum number of backwaters to be sampled in the reach to obtain unbiased and accurate estimates of presence and abundance of centrarchids in backwaters. Second, we will develop comparisons of seining and electrofishing techniques to detect presence and abundance of centrarchids within backwaters. Third, given data gathered in objective 2, we will develop estimates of the level of sampling intensity needed to provide unbiased estimates of centrarchid presence and abundance in backwaters that are selected. This can be accomplished partially with existing data and partially with new data.

Little was accomplished in 2003 because of a delay in receiving FY-03 funding until late September 2003. Project completion is anticipated in FY-04.

## IV. Study Schedule: 2003-2004

Funding was received late in 2003, so all activity will need to occur in 2004.

V. Relationship to RIPRAP:

Colorado River Action Plan: Mainstem

- III. Reduce negative impacts of nonnative fishes.
- III.A. Develop and implement control programs in reaches of the Colorado River occupied by endangered fishes. Each control activity will be evaluated for effectiveness and then continued as needed.
- III.A.3.b. Remove nonnative centrarchids from backwaters and other low velocity habitats.
- VI. Accomplishment of FY 2003 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

Little was accomplished in 2003 because of a delay in receiving FY-03 funding until late September 2003. We will still attempt to finish this project in FY-04.

- VII. Recommendations: No modifications needed.
- VIII. Project Status: On track and ongoing.
- IX. FY 2003 Budget Status
  - A. Funds Provided: total provided in late FY-03 was \$28,600, which was funding for the entire project through FY-04.
  - B. Funds Expended: None because money was not received until late.
  - C. Difference: \$28,600, we will begin the project now that the funding has arrived.
  - D. Percent of the FY 2003 work completed, and projected costs to complete: Nothing completed; no additional funds needed.
  - E. Recovery Program funds spent for publication charges: None.
- X. Status of Data Submission (Where applicable): Not applicable.
- XI. Signed: <u>Kevin R. Bestgen</u> 11 November 2003
  Principal Investigator Date